Lifestyle of Office Employees at the Primary Clinic Secretariat Building of the Supreme Court of the Republic of Indonesia

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Abstract

Hypertension is a disease that affects many people in developing countries, such as Indonesia. This disease has become a threat to many people because of an unhealthy lifestyle. Hypertension is a strong and important risk factor for cardiovascular and kidney diseases, such as coronary disease, heart failure and kidney failure. The purpose of this study was to determine the relationship between lifestyle and the incidence of hypertension in office employees at the Primary Clinic Secretariat Building of the Supreme Court of the Republic of Indonesia. This type of research is analytic quantitative with a cross-sectional study design. The sample selection technique was carried out by means of non-probability sampling, and the type of statistical test used was chi square. The population in this study were all employees who visited the Primary Clinic of the Court Secretariat Building, the sample size was 87 respondents. Statistical test results showed that the factor associated with the incidence of hypertension was diet (p value = 0.019; OR =3,143), exercise habits (p value=0.048; OR=2,647), and stress level (p value=0.040; OR=2,742). While the factor that is not related to hypertension is smoking behavior (p value = 0.523; OR =1,467). To all employees to control blood pressure so they don't suffer from hypertension by: avoiding salty and fast food, exercising regularly and reducing stress when carrying out work in the office.

I. Introduction

Hypertension is a disease that affects many people in developing countries, such as Indonesia. This disease has become a threat to many people because of an unhealthy lifestyle. In order to control non-communicable diseases, especially hypertension, activities have been carried out to increase early detection of risk factors for non-communicable diseases through various efforts, such as: increasing access to integrated services for non-communicable diseases at first-level health facilities, counseling about the harmful effects of smoking, and organizing services to stop smoking and other actions (Kemenkes RI, 2018). Health is a very important element of the quality of life in national development (Najikhah, 2021). While indirect factors such as economic factors, culture, education and work, health service facilities (Lubis, 2021).

Hypertension is often referred to as the silent killer because of its high level of malignancy in the form of permanent disability and sudden death (Widianto et al., 2019).

Productive age is a stage in the development of life, at this age humans are at the peak of activity which tends to be more active, dense activity causes a person to experience health problems. The cause of hypertension is often associated with a poor lifestyle such as diet (excess salt consumption), smoking, and lack of physical activity. This is what can cause a person to develop a disease such as hypertension.

Global hypertension cases are estimated at 22% of the total world population. Around 2/3 of people with hypertension come from middle to lower economic countries (Ministry of Health, 2019). In Indonesia, based on the results of the 2018 Basic Health Research it was found that the prevalence of hypertension reached 34.11% in residents >18 years.Riskesdas data (2018), states that almost a quarter (24.5%) of Indonesia's population aged over 10 years consume salty food every day, once or more. Globally, the level of physical activity of adults found that 23% of men and 32% of women aged over 18 years have less active physical activity. The proportion of lack of physical activity in Indonesia has increased, in 2013 it was 26.2% and rose to 33.5% in 2018. The national survey conducted in 2013 and 2018 shows that tobacco use in Indonesia is still relatively high among adults and adolescents. The prevalence in adults has not shown a decline over this 5-year period, while the prevalence of smoking in adolescents aged 10-19 years has increased from 7.2% in 2013 to 9,

Lifestyle is one of the goals of SDG's. SDG's is a sustainable development program in which there are 17 goals with 169 measurable achievements and deadlines set by the United Nations as a world development agenda for the safety of humans and the planet, one of the goals relates to lifestyle, namely ensuring sustainable patterns of consumption and production. sustainable and ensure healthy lives and promote well-being for all at all ages. Lifestyle is also an important factor that greatly influences people's lives and is closely related to the incidence of hypertension, especially in productive age. Factors causing hypertension in productive age are due to unhealthy lifestyles such as diet (consumption of salt), lack of physical activity, and smoking.

According to Smeltzer (2016) that the causes of hypertension can be divided into two major groups, namely essential hypertension or primary hypertension, namely hypertension with unknown causes and secondary hypertension where hypertension occurs as a result of other diseases. Target organ damage due to complications of hypertension will depend on the magnitude of the increase in blood pressure and the length of time the blood pressure condition is undiagnosed and untreated. The organs of the body are targeted, including the brain, eyes, heart, kidneys and can also affect the peripheral arteries themselves.

Hypertension is a strong and important risk factor for cardiovascular and kidney diseases, such as coronary disease, heart failure and kidney failure. Hypertension can be influenced by genetic factors, environmental factors and the interaction between the two factors. There are risk factors for hypertension that can be controlled and some that cannot be controlled. Factors that can be controlled are diet, obesity, physical activity, eating habits, smoking and stress. While the factors that cannot be controlled are heredity, gender and age. Someone whose parents suffer from hypertension, their children will be at risk of developing hypertension.

Lifestyle changes contribute to the incidence of hypertension, and this affects several psychological conditions of a person. A healthy lifestyle describes daily behavior patterns that lead to efforts to maintain a positive physical and mental condition. A healthy lifestyle which includes sleeping habits, eating, weight, not smoking, exercising regularly, and controlling stress, and to get good health, namely by changing lifestyles in maintaining health. In a survey conducted by researchers at the Primary Clinic Secretariat of the Supreme Court of the Republic of Indonesia, initial information was obtained that cases of hypertension among employees at this institution were quite high, based on the initial

information obtained, it was stated that there were 223 cases of hypertension from a total of 850 employees meaning that there are 26.2% of employees at the Secretariat of the Supreme Court suffer from hypertension. It is estimated that it will continue to increase considering unhealthy lifestyles such as eating patterns, sleeping patterns, not exercising, and stressors. This is expected to occur due to work factors. The aim of the study was to find out the relationship between lifestyle and the incidence of hypertension in office employees at the Primary Clinic Secretariat Building of the Supreme Court of the Republic of Indonesia in 2022.

II. Research Method

This research theme is about the relationship between lifestyle and the incidence of hypertension sufferers at the Primary Clinic Secretariat Building of the Supreme Court of the Republic of Indonesia. The variables studied were hypertension, diet, exercise habits, smoking behavior and stress. This type of research is analytic quantitative with a cross-sectional study design. The sample selection technique was carried out by means of non-probability sampling, and the type of statistical test used was chi square (kai squared). The population in this study were all employees who visited the Primary Clinic of the Court Secretariat Building, the sample size was 87 respondents.

III. Discussion

3.1 Results
a. Univariate Analysis

Table 1. Distribution of Hypertension and Lifestyle

Variable	Results Measure	Frequency	Percentage
Hypertension	Yes	36	41,4
	Not	51	58,6
Dietary habit	At risk	39	44.8
	No risk	48	55,2
Smoking habit	Smoker	34	39,1
	Not a smoker	53	60,9
Sports habits	Not a routine	41	47,1
	Routine	46	52,9
Stress level	Tall	43	49,4
	Low	44	50,6

Based on table 1 regarding the frequency distribution of respondents according to hypertension, eating patterns, smoking behavior, exercise habits, and stress levels, it shows that of the 87 respondents studied, it was found that 41.4% of respondents had hypertension and 58 who did not have hypertension. 6%. Of all the respondents studied, it was found that the majority of respondents whose eating patterns were not at risk, namely 55.2%, and those whose eating patterns were at risk, were 44.8%. Of all the respondents studied, it was found that the majority of respondents were non-smokers, namely 60.9%, and respondents who smoked were 39.1%. Of all the respondents studied, it was found that the majority of respondents regularly exercised, namely 52.9%, and respondents who did not exercise regularly amounted to 47.1% and those who were not hypertensive were as much as 58.6%.

Of all the respondents studied, it was found that the majority of respondents whose eating patterns were not at risk, namely 55.2%, and those whose eating patterns were at risk, were 44.8%. Of all the respondents studied.

b. Bivariate Analysis
1. The Relationship between Diet and Hypertension

Table 2. Relationship Between Diet and Hypertension

Dietary habit	Hypertension events			P Value	OR 95% CI
	Yes	No	Total		
At risk	22 (56.4)	17 (43.6)	39 (100.0)		3,143 (1,2-7,6)
No risk	14 (29.2)	34 (70.8)	48 (100.0)	0.019	
Total	36 (41.4)	51 (58.6)	87 (100.0)		

Based on table 2 regarding the distribution of hypertension according to dietary pattern, it was found that out of 39 respondents whose eating patterns were at risk, it was found that most of them had hypertension, namely 56.4% and 43.6% who did not have hypertension. The results of the statistical test "chi square test" obtained a value of p = 0.019 (p value <alpha 0.05). The decision was Ho rejected and Ha accepted, meaning that there was a significant relationship between diet and the incidence of hypertension. The statistical test results showed the value of OR = 3.143 (rounded to 3), meaning that respondents whose eating patterns were at risk (like salty food) had the potential to experience hypertension 3 times greater than respondents whose eating patterns were not at risk.

2. The Relationship between Smoking Behavior and Hypertension

Table 3. Relationship Between Smoking Behavior and Hypertension

Smoking Behavior	Hypertension events			P Value	OR 95% CI
	Yes	No	Total		
Smoker	16 (47.1)	18 (52.9)	34 (100.0)		1,467 (0.6-3.5)
Not a smoker	20 (37.7)	33 (62.3)	53 (100.0)	0.523	
Total	36 (41.4)	51 (58.6)	87 (100.0)		

Based on table 3 regarding the distribution of hypertension according to smoking behavior, it was found that out of 34 respondents who were smokers, it was found that 47.1% of respondents had hypertension and 52.9% who did not have hypertension. The results of the statistical test "chi square test" obtained a value of p = 0.523 (p value <alpha 0.05). The decision was that Ho was accepted and Ha was rejected, meaning that there was no significant relationship between smoking behavior and the incidence of hypertension. The conclusion is that there is no difference in the incidence of hypertension between smokers and non-smokers.

c. The Relationship between Exercise Habits and Hypertension

Table 4. Relationship Between Exercise Habits and Hypertension

Sports Habits	Hypertension events			P Value	OR 95% CI
	Yes	**Not**	**Total**		
Not a routine	22 (53.7)	19 (46.3)	41 (100.0)	0.048	2,647 (1,1-6,3)
Routine	14 (30.4)	32 (69.6)	46 (100.0)		
Total	36 (41.4)	51 (58.6)	87 (100.0)		

Based on table 4 regarding the distribution of hypertension events according to exercise habits, it was found that of the 41 respondents who did not exercise regularly, it was found that most of them had hypertension, namely 53.7% and 46.3% who did not have hypertension. The results of the statistical test "chi square test" obtained a value of p = 0.048 (p value <alpha 0.05). The decision was Ho rejected and Ha accepted, meaning that there is a significant relationship between exercise habits and the incidence of hypertension. The statistical test results showed the value of OR = 2.647 (rounded to 3), meaning that respondents who did not exercise regularly had the potential to experience hypertension 3 times greater than respondents who exercised regularly.

d. The Relationship between Stress Levels and Hypertension

Table 5. Relationship Between Stress Levels and Hypertension Incidence

stress	Hypertension events			P Value	OR 95% CI
	Yes	**Not**	**Total**		
Tall	23 (53.5)	20 (46.5)	43 (100.0)	0.040	2,742 (1,1-6,6)
Low	13 (29.5)	31 (70.5)	44 (100.0)		
Total	36 (41.4)	51 (58.6)	87 (100.0)		

Based on table 5 regarding the distribution of hypertension events according to stress levels, it was found that out of the 43 respondents who found that most of them had hypertension, namely 56.4% and those with high levels of stress, there were as many as 53.5% of respondents who experienced hypertension. The results of the statistical test "chi square test" obtained a value of p = 0.040 (p value <alpha 0.05). The decision was that Ho was rejected and Ha was accepted, meaning that there is a significant relationship between stress levels and the incidence of hypertension. The results of the statistical test showed the value of OR = 2.742 (rounded to 3), meaning that respondents with high levels of stress were 3 times more likely to experience hypertension than respondents with low levels of stress.

3.2 Discussion
a. The Relationship between Diet and Hypertension

The results of this study are in line with research conducted by Marlita et al (2022) that diet affects the incidence of hypertension. A diet that likes salty, ready-to-eat food and meat has the opportunity to cause an increase in blood pressure in respondents. Furthermore, in Widianto's research, AA et al. (2019) also revealed that diet contributes greatly to the incidence of hypertension, salty foods and types of ready-to-eat food contain high MSG which triggers an increase in blood pressure.

One of the foods that are high in sodium content is processed food or instant food. The use of salt in instant food or processed food as a seasoning is more often consumed by respondents. Excessive and continuous sodium intake will result in a sodium imbalance which can have an impact on blood pressure. Sodium intake that is too high can cause a disturbance in the balance of sodium in the blood. The relationship between consumption of salty foods and the incidence of hypertension. whereas in this study there was no relationship between salty food and the incidence of hypertension.

Based on the results of this study and previous theory, according to the researchers, respondents and people who have not experienced an increase in blood pressure/suffering from hypertension need to monitor the type of food that is often consumed in order to prevent hypertension. People must be more selective in choosing the food they want to consume in order to avoid the risk of increasing blood pressure. This factor is the biggest trigger for rising blood pressure, therefore people must be able to independently control their behavior in consuming food, such as ready-to-eat foods and salty foods. Given, this disease is very difficult to treat, therefore there is a need for proper prevention efforts.

b. The Relationship between Smoking Behavior and Hypertension

The results of this study are not in line with the research of Marlita et al (2022) that smoking has a significant effect on the incidence of hypertension. Furthermore, Akbar and Eko's research (2020) shows that smoking habits ($\rho=0.037$) are a contributing factor to hypertension, meaning that people who smoke have a greater chance of suffering from hypertension than people who don't smoke.

Smoking habits determine a person's lifestyle habits, as it is known that smoking has a negative impact on health. Smoking has an impact on arterial stiffness, arterial stiffness can increase blood pressure, so smoking should be avoided. The habit of smoking in Indonesian society has become a habitus that is carried out by many people. When every pack of cigarettes has an affirmation about the dangers of smoking / the consequences of smoking behavior, people still consume cigarettes regularly.

The results of this study indicate that there is no relationship between smoking and the incidence of hypertension, perhaps because the comparison data ratio between smokers and non-smokers is not comparable so that the direction is not significant. Even so, according to the researcher, the smoking factor has been proven in previous studies and theories that there is a significant effect between smoking and an increase in blood pressure, so researchers still urge respondents to stop smoking behavior before this problem occurs. Bearing in mind, this disease is difficult to treat, and some have to take medication for life in order to maintain normal blood pressure.

c. The Relationship between Exercise Habits and Hypertension

The results of this study are in line with research conducted by Ali, B., & Sumardiyono, S. (2019) that exercise habits are one of the causes of hypertension.Next in researchRahmayani, ST (2019) stated that irregular exercise has the potential to increase a

person's blood pressure, whereas those who are routinely physically active can maintain normal blood pressure.

According to the researcher, the large number of respondents who work very busy at the Supreme Court office allows respondents to rarely exercise and spend more time in the office. Habits like these can then trigger hypertension. No matter how busy the tasks and work the employees are doing, there should be time set aside several times a week to exercise. Exercise doesn't have to be done for a long time, but the quality of the exercise is most important to maintain fitness and control blood pressure so it doesn't rise. According to the researchers, routine group exercise activities carried out in the office every week must be streamlined so that employees want to take the time to burn calories. This should be of concern to all employees.

d. The Relationship between Stress and Hypertension

The results of this study are in line with previous research conducted by Rusnoto et al (2018) that one of the factors that influence the incidence of hypertension is stress, the higher a person's stress level, the higher the risk of experiencing hypertension, and vice versa.Furthermore, in Akbar and Eko's research (2020) it was shown that stress ($\rho = 0.029$) is a factor causing hypertension. Then in researchSitumorang, Fanny Damayanti also revealed a positive relationship between stress and hypertension.

According to the researchers, the results of this study and previous studies have confirmed that one of the causes of hypertension is stress. In this day and age, every individual is competing to maximize his career, and everyone is busy prioritizing work to achieve success. Busyness and hard work as well as heavy goals result in a feeling of stress and the emergence of high pressure. Feelings of depression make blood pressure rise. In addition, busy people also do not have time to exercise. As experienced by employees at the Supreme Court office, the type of work that requires extra energy to complete makes them often stressed and rarely exercise. As a result, more and more body fat accumulates which can inhibit blood flow.

IV. Conclusion

Based on the results of the research and discussion in the previous chapter, several conclusions can be drawn as follows:
1. The results of this study indicate that of all the respondents studied, it was found that 41.4% of respondents experienced hypertension and 58.6% who did not have hypertension.
2. There is a relationship between diet and the incidence of hypertension in office employees at the Supreme Court Primary Clinic (p value=0.019; OR=3.143).
3. There is no relationship between smoking behavior and the incidence of hypertension in office employees at the Supreme Court Primary Clinic (p value=0.523; OR=1.467).
4. There is a relationship between exercise habits and the incidence of hypertension among office workers at the Supreme Court Primary Clinic (p value=0.048; OR=2.647).
5. There is a relationship between stress levels and the incidence of hypertension in office employees at the Supreme Court Primary Clinic (p value=0.040; OR=2.742).

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